

May 20, 2013

Mayor Odell and Council Members;

As we all know, the Critical Areas Special Overlay was an exhaustive, decade long, boots on the ground study by King County geologists, hydrologists, wetland and wildlife specialists and others to identify the hazards of disturbing the soil along the Pine Lake Plateau slopes. With all due respect, however, there are no such credentials on the Planning Commission. At the May 7, meeting, Mr. Mayor, you mentioned the hard work and many hours spent volunteering by the Planning Commission. This is commendable, but to suggest that LID, closed-roof drain systems, and other proposed measures would somehow nullify the county's lengthy study and its findings would be ill advised. Engineering does have its limits, and in my experience there are undetectable anomalies that occur when disturbing virgin soils.

Since 1982 I have worked building tunnels, bridges, freeways and installed literally miles and miles of pipe. All these projects had engineered plans which of course required limiting damage. And yet occasionally things would happen. There are many of examples of unexpected ground conditions and water that held up a project and glaring examples of outright damage.

One example in 2000, working for Seattle Public Utilities, part of the project was exploratory directional drilling to identify soils. A two inch drill bit was sent through the top of Norway Hill in Bothell. The layers of the hillside were laid down geologically from the West, sloping down to the East, and the underground disturbance interrupted the normal water flow resulting in a blowout that sent more than three thousand yards of mud down to John Wayne Golf Course and almost flowed into the Sammamish Slough.

We have all seen the devastating slides in Western Washington, the slide on Whidbey Island, the costly slides in Magnolia and in West Seattle, and the slides along the Burlington Northern Santa Fe tracks. My Brother works for BNSF on the Sounder route to Everett. In the six months between September 2012 and February 2013 there were 58 slides which resulted in that commuter line being shut down. Many of these slides were the result of development at the top of the ridge over the tracks.

None of the sites that I have worked on were considered erosion hazards and yet damage and extra cost occurred. And in my opinion, the risks of digging in a known erosion hazard zone are too great to gamble on any pilot project.

Digging in virgin soils changes underground hydrology. Trenching and pipe bedding become a conduit themselves for new underground water flows. You can't completely insure that a closed roof drain system will stay closed because when you install the pipes you may encounter soils and other conditions which you cannot control.

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